Gulf of Mexico Harmful Algal Bloom Bulletin

20 December 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 17, 2007

Conditions Report

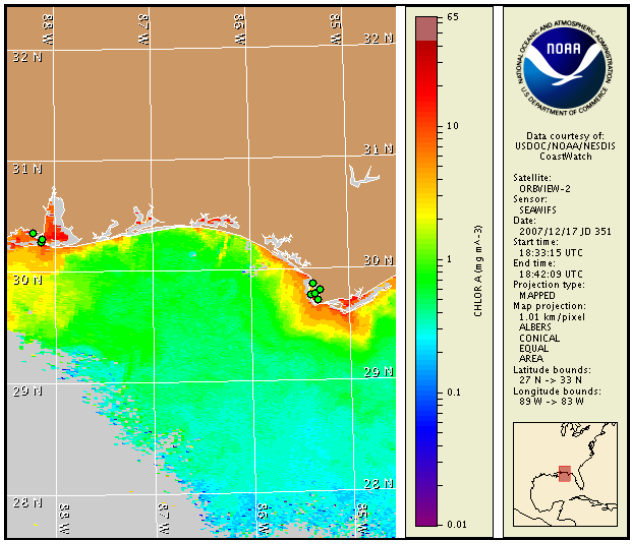
NW Florida: A harmful algal bloom has been identified in patches from Gulf County, Florida to Hancock County, Mississippi. Patchy very low impacts are possible today through Sunday in the bay regions of Gulf County. Patchy low impacts are possible for the bay regions of Okaloosa County, with patchy very low impacts possible for coastal Okaloosa today, Saturday, and Sunday. Patchy very low impacts are possible in Hancock County, Mississippi, and in Mobile and Baldwin Counties, Alabama today, Saturday, and Sunday. No other impacts are expected in northwest Florida, Alabama, or Mississippi today through Sunday, December 23.

Analysis

NW Florida: The harmful algal bloom persists in patches along the coasts of Mississippi, Alabama, and the Florida panhandle. Recent sampling results this week found no *K.brevis* near Cedar Point, Portersville Bay, and Dauphin Island Bay, Alabama (AL Department of Public Health; 12/17). No other recent samples were collected this week along the Florida panhandle or Mississippi and Alabama coasts. Chlorophyll levels continue to be elevated (4-6μg/L) along the coast from Walton to Franklin Counties (30°7'42"N 85°50'45"W to 29°35'26"N 85°4'13"W, with high concentrations (>10μg/L) at 29°35'59"N 85°4'49"W based on satellite imagery from 12/19). Continued sampling is recommended. Satellite imagery (12/17) indicates that chlorophyll levels also remain elevated from Santa Rosa County, Florida to Hancock, Mississippi and extend as far offshore Mobile Bay as 29°58'59"N 88°74'9"W. Southerly winds today, Saturday, and Sunday may increase the potential for impacts along the coast.

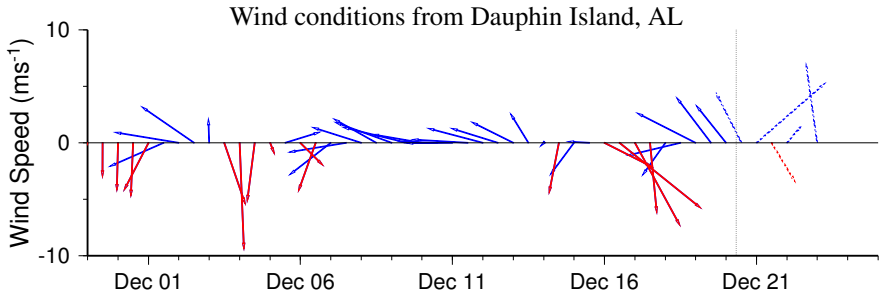
****Due to extended holiday closure on Monday, December 24, the next bulletin will be disseminated on Wednesday, December 26. An updated Conditions Report will be sent Friday, December 21, stating expected impacts through the closure.**

~Keller, Allen



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 10 to 18 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

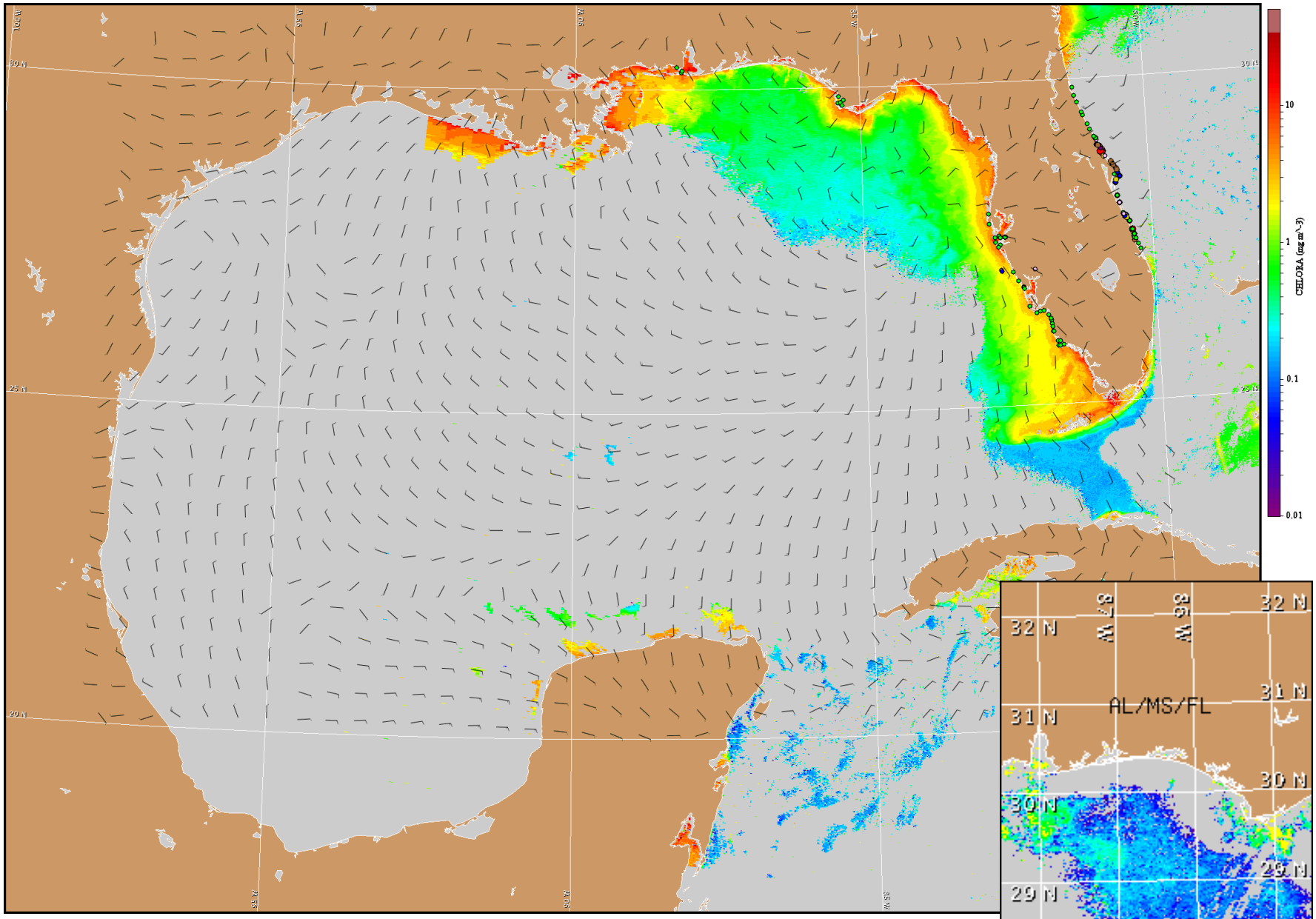
http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



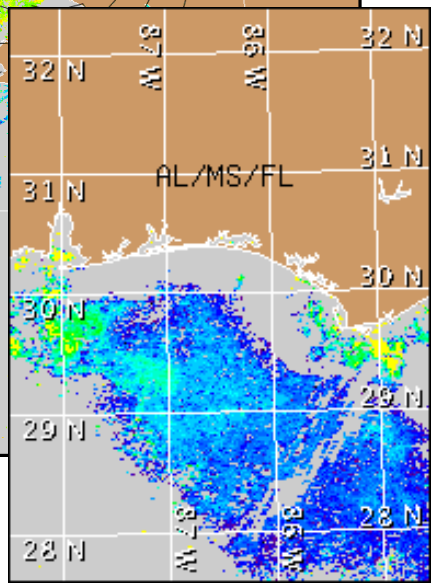
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

NW Florida: Southeasterly winds today, becoming southwesterly tonight (20-25 knots; 10-13 m/s). Northeasterly winds on Friday (10-15 knots; 5-8 m/s). Southeasterly winds on Saturday (15-20 knots; 8-10m/s). Northwesterly winds on Sunday (15-20 knots; 8-10 m/s).

MS & AL: Southeasterly winds today (15 knots; 8 m/s) with southwesterly winds tonight (20-25 knots; 10-13 m/s). Northwesterly winds on Friday (10-15 knots; 5-8 m/s). Easterly winds Friday night through Saturday (10-20 knots; 5-10 m/s), with southeasterly winds Saturday night. Southerly winds on Sunday (15-20 knots; 8-10m/s).

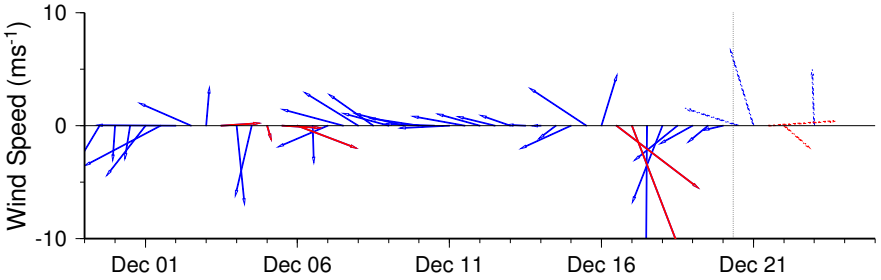


Satellite chlorophyll image and forecast winds for December 21, 2007 12Z with Cell concentration sampling data from December 10 to 18 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Tyndall AFB Tower C



Wind conditions from Panama City, FL